





PAGER

Version 3 Created: 1 day, 0 hours after earthquake

10,000

100,000

1,000

M 5.7, 220km WNW of Pangai, Tonga Origin Time: 2019-09-04 09:48:21 UTC (Tue 21:48:21 local) Location: 18.9476° S 176.2453° W Depth: 10.0 km

Estimated Fatalities 65% 10,000 1,000 100,000

Green alert for shaking-related fatalities Estimated Economic Losses and economic losses. There is a low likelihood of casualties and damage. 65%

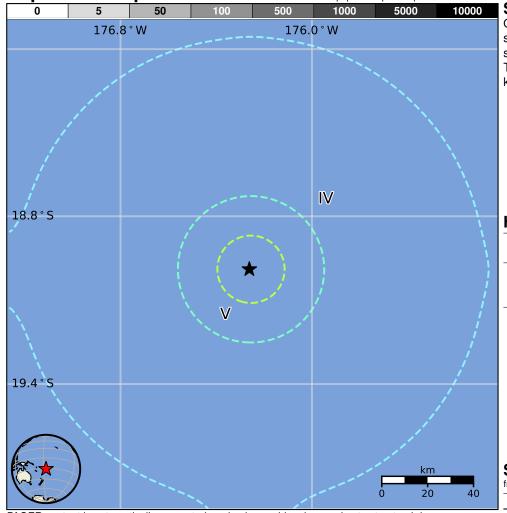
Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		_*	_*	0	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	11-111	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

^{*}Estimated exposure only includes population within the map area.

Population Exposure

population per 1 sq. km from Landscan



Structures

Overall, the population in this region resides in structures that are highly vulnerable to earthquake shaking, though some resistant structures exist. The predominant vulnerable building types are unknown/miscellaneous types and wood construction.

100

USD (Millions,

Historical Earthquakes

Date	Diet	Mag.	Max	Shaking
(UTC)	(km)	way.	MMI(#)	Deaths
1980-03-31	313	6.1	V(4k)	_
1983-03-21	304	6.7	VII(53k)	_
2006-05-03	261	8.0	VIII(7k)	0

Selected City Exposure

from GeoNames.org

MMI City **Population**

bold cities appear on map.

(k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty. https://earthquake.usgs.gov/earthquakes/eventpage/us70005bwn#pager

Event ID: us70005bwn